

# Review– Naming Chemical Compounds

Circle the number of the compounds that you identify as covalent. Put a box around the number of the compounds you identify as acids. Name or write the formula for all of the compounds.

Name the following chemical compounds:

- 1)  $\text{HBr}$  Hydrobromic Acid
- 2)  $\text{Ca}(\text{C}_2\text{H}_3\text{O}_2)_2$  Calcium Acetate
- 3)  $\text{P}_2\text{O}_5$  Diphosphorus pentoxide
- 4)  $\text{Ti}(\text{SO}_4)_2$  Titanium sulfate
- 5)  $\text{C}_3\text{P}_4$  Tricarbon tetraphosphide
- 6)  $\text{K}_3\text{N}$  Potassium nitride
- 7)  $\text{SO}_2$  Sulfur dioxide (remember not to use mono for first atom)
- 8)  $\text{CuOH}$  Copper (I) hydroxide
- 9)  $\text{H}_2\text{CO}_3$  Carbonic Acid
- 10)  $\text{Li}_2\text{S}$  Lithium sulfide

Write the formulas for the following chemical compounds:

- 11) silicon dioxide  $\text{SiO}_2$
- 12) Heptasulfur trinitride  $\text{S}_7\text{N}_3$
- 13) manganese (II) phosphate  $\text{Mn}_3(\text{PO}_4)_2$
- 14) phosphorus acid  $\text{H}_3\text{PO}_3$
- 15) diboron tetrabromide  $\text{B}_2\text{Br}_4$
- 16) magnesium sulfate  $\text{MgSO}_4$
- 17) Hydrobromic acid  $\text{HBr}$
- 18) ammonium oxide  $(\text{NH}_4)_2\text{O}$
- 19) tin (IV) selenide  $\text{SnSe}_4$
- 20) carbon tetrachloride  $\text{CCl}_4$

## Practice Sheet for 9.1 and 9.2

Draw the following Lewis Structures

HCN	P <sub>2</sub>	SiO <sub>2</sub>
$H-C \equiv N$	$\ddot{P} \equiv \ddot{P}$	$:\ddot{O} = Si = \ddot{O}:$
PCl <sub>3</sub>	F <sub>2</sub>	SCl <sub>2</sub>
$\begin{array}{c} \ddot{Cl} - \ddot{P} - \ddot{Cl} \\   \\ \ddot{Cl} \end{array}$	$:\ddot{F} - \ddot{F}:$	$\begin{array}{c} \ddot{Cl} - \ddot{S} - \ddot{Cl} \end{array}$
S <sub>2</sub>	SiBr <sub>4</sub>	C <sub>2</sub> H <sub>5</sub> OH
$:\ddot{S} = \ddot{S}:$	$\begin{array}{c} \ddot{Br} \\   \\ \ddot{Br} - Si - \ddot{Br} \\   \\ \ddot{Br} \end{array}$	$\begin{array}{c} H & H \\   &   \\ H - C - C - \ddot{O} - H \\   &   \\ H & H \end{array}$

Write the Name of the Following Compounds

S <sub>3</sub> O <sub>2</sub>	Trisulfur dioxide
P <sub>5</sub> F <sub>8</sub>	Pentaphosphorus Octafluoride
C <sub>6</sub> Br <sub>2</sub>	Hexacarbon dibromide
NS <sub>2</sub>	Nitrogen disulfide
Se <sub>10</sub> I <sub>7</sub>	Octaselenium hepta iodide
HI	Hydroiodic acid
HNO <sub>2</sub>	Nitrous acid

Write the Chemical Formula of the Following Molecular Compounds.

heptaphosphorus monochloride	P <sub>7</sub> Cl
tetrasulfur pentiodide	S <sub>4</sub> I <sub>5</sub>
carbon dinitride	CN <sub>2</sub>
hexaphosphorus tribromide	P <sub>6</sub> Br <sub>3</sub>
octanitrogen nonasulfide	N <sub>8</sub> S <sub>9</sub>
Hydrocyanic acid	HCN
Carbonic acid	H <sub>2</sub> CO <sub>3</sub>